

*Vandenberg AFB Municipal Storm Water Program BMPs (Years 1 - 5)*

<i>BMP</i>	<b>Details</b>	<b>*Target Date</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>Modifications</b>
<i>PM-2 Legal Authority</i>	Review, revise or adopt new relevant policies via base orders, installation management plans or contractual provisions to ensure the installation has the legal authority to meet the requirements in Permit Section F.5.a.	2015		X				
<i>PM-1 Illicit Discharge Detection and Elimination Policy</i>	Effectively prohibit non-storm water discharges through the MS4 with exceptions for permitted discharges of non-storm water. The policy letter will be maintained and procedures described in Permit Section F.5.d.3 and BMP ID-3 will be used to address illicit discharge elimination.	2014	X	X	X	X	X	was ID-7 in SWMP Policy established March 2012
<i>PE-1 Media Campaign</i>	Utilize existing media sources to promote storm water education and pollution prevention, such as intranet for base employees, public website, and publications: Vandenberg Base Bulletin, Consumer Confidence Report, and Twilight Times.							
	1. Update the Water Quality Protocol of the 30 CES/CEIE intranet as needed. Post a copy of the Guidance Document and educational materials.	2014	X	X	X	X	X	
	2. Develop one storm water item for each of the following Vandenberg AFB publications: <i>BBC Newsletter</i> , Base Bulletin and the annual drinking water Consumer Confidence Report.	2014	X	X	X	X	X	
	3. Integrate storm water awareness messages and information on a publicly accessible website.	2014	X	X	X	X	X	
<i>PE-2 New Employee (Newcomer) Brief</i>	1. Distribute the storm water pollution prevention information to 100 percent of new military employees.	2014	X	X	X	X	X	
	2. Review content for updates and amend as needed.	2014	X	X	X	X	X	
<i>PE-3 Residential Storm Water Education</i>	1. Coordinate with Balfour Beatty Communities and 30 CES/CEIHH to annually distribute a residential-specific storm water pollution prevention brochure within Military Family	2014	X	X	X	X	X	
	2. Review brochure content and update as necessary.	2014	X	X	X	X	X	
	* Print up to 1,000 additional copies of the brochure to resupply as needed.							

<i>BMP</i>	<i>Details</i>	<i>*Target Date</i>	<i>2014</i>	<i>2015</i>	<i>2016</i>	<i>2017</i>	<i>2018</i>	<i>Modifications</i>
<i>PE-4 School Storm Water Education</i>	Provide independent, parochial, and public schools with materials to effectively educate school children, if applicable, about storm water and how they can help to protect water quality in their local watersheds. In the case that a local program does not exist, the Permittee may use California's Education and Environment Initiative Curriculum or equivalent.	2015		X				
	Note: The library could also still be used to promote educational messages and distribute audience-specific storm water guides or information.							
<i>PE-5 Audience Specific Storm Water Guides</i>	1. Develop and/or distribute one detailed storm water pollution prevention guide or Fact Sheet for target audiences. Advertise the Storm Water Hotline phone number on all storm water educational materials. Develop (or coordinate with existing effective programs) and convey messages specific to reducing discharges from pressure washing operations and landscape irrigation.	2014	X	X	X	X	X	Includes PE-6, GH-4.7, GH-5, ID-8.1 in SWMP
	* Produce 20 hard copies and one electronic copy for submittal to 30 CES/CEIE.							
	2. Distribute the storm water guides as appropriate and track the quantity of guides distributed. Distribute Landscaping Fact Sheets annually.	2014	X	X	X	X	X	
	3. Review guide content for potential updates	2014	X	X	X	X	X	
<i>PE-6 Public Awareness Surveys (Earth Day)</i>	1. Prepare and distribute a quiz for the public to complete, which will aid CEIE determine program effectiveness.	2015		X	X	X	X	was PP-4.2 & 4.3 in SWMP
	2. Document quiz results and look for trends.	2015		X	X	X	X	
<i>PE-7 Storm Water Training for Facility Managers</i>	1. Present materials regarding storm water program, illicit discharge detection, and pollution prevention at bimonthly facility manager training session.	2014	X	X	X	X	X	was ID-3 in SWMP
<i>PE-8 Illicit Discharge Detection and Elimination Pocket Guide</i>	1. Disseminate the IDDE pocket guide to all shops during training sessions and inspections, as well as to the public.	2014	X	X	X	X	X	was ID-5 in SWMP
	2. Review the pocket guide for updates and amend as necessary.	June	X	X	X	X	X	

<i>BMP</i>	<i>Details</i>	<i>*Target Date</i>	<i>2014</i>	<i>2015</i>	<i>2016</i>	<i>2017</i>	<i>2018</i>	<i>Modifications</i>
<i>PE-9 Municipal Operations Staff Storm Water Pollution Prevention Training</i>	1. Provide a biennial training program for appropriate employees involved in implementing pollution prevention and good housekeeping practices in the Pollution Prevention/Good Housekeeping for Permittee Operations Permit sections.	2015		X	X	X	X	was GH 3.1, GH-4.10 in SWMP
	* Track the number of attendees.							
	2. Assess trained staff's knowledge of pollution prevention and good housekeeping and revise the training as needed.	2016			X	X	X	
<i>PE-10 Construction Site Oversight</i>	Conduct monthly oversight inspections to ensure that contractors are using appropriate BMPs, good housekeeping practices, and following standard operating procedures.	2014	X	X	X	X	X	was CS-3.2 in SWMP
	* Track all oversight inspections.							
<i>PE-11 Service Contract Provisions</i>	1. Annually, prior to contract issuance by 30 CONS/LGCB, 30 CES/CEOSS will coordinate with 30 CES/CEIE to review Section 01 57 20 of the contract specifications.	2014	X	X	X	X	X	was GH-2.1 & 2.2 in SWMP
	2. Provide oversight of service contractors performing activities which could affect storm water to ensure that contractors are using appropriate BMPs, good housekeeping practices and following standard operating procedures. Perform audit while services are being performed, document findings and correct deficiencies.	2016			X	X	X	
<i>PE-12 Regional Outreach</i>	By the first year online Annual Report, the Permittee will submit information indicating which compliance participation option it will use to comply with the public education and outreach requirements in Section F.5.b.1.	By Year 1 Annual Report date Sep-14	X					
<i>PE-13 Staff and Site Operator Training and Education: Illicit Discharge Detection and Elimination Training</i>	1. Develop and implement a training program for all staff, who, as part of their normal job responsibilities, may be notified of, come into contact with, or otherwise observe an illicit discharge or illegal connection to the storm drain system.	2016			X	X	X	
	2. Follow-up training provided as needed to address changes in procedures, techniques, or staffing. Training of new Permittee staff who, as part of their normal job responsibilities may be notified of, come into contact with, or otherwise observe an illicit discharge or illegal connection	2016			X	X	X	

<i>BMP</i>	<b>Details</b>	<b>*Target Date</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>Modifications</b>
	3. Assess trained staff's knowledge of pollution prevention and good housekeeping and revise the training as needed.	2016			X	X	X	
	4. Contact information, including the procedure for reporting an illicit discharge, will be included in each of the Permittee's fleet vehicles that are used by field staff.	2016			X	X	X	
<i>Landscaping Education (No number)</i>	Not required with existing effective program. Develop and convey water efficient/ storm water friendly landscaping information, if appropriate. Message is provided in the Facilities Excellence Plan = existing effective program.	Complete						
<i>PP-1 Storm Drain Labels</i>	Inspect and replace missing or damaged storm water awareness labels that have been affixed to storm drains throughout the Main and South Cantonments every other year.	2014	X	X	X	X	X	was PE-5 in SWMP
<i>PP-2 Earth Day</i>	Participate in an Earth Day event annually. Distribute educational materials and document the number of attendees at the event.	2014	X	X	X	X	X	was PP-4.1 in SWMP
<i>Storm Water Working Group</i>	Not required as a BMP. Meet with participating organizations as needed.							
<i>Santa Barbara County Association of MS4 Managers Meetings</i>	Not required as a BMP. Attend as time permits.							
<i>Environmental Awareness Working Group (EAWG)</i>	Not required as a BMP. Share storm water updates with this audience as appropriate.							
<i>ID-1 Outfall Mapping</i>	Create and maintain an accurate outfall map . The map will at a minimum show the drainage areas contributing to the outfalls that directly discharge to a receiving water and the location of all water bodies receiving direct discharges.	2014 and Update as Needed	X	X	X	X	X	was ID 1.2 & ID-2 in SWMP
<i>ID-2 Outfall Inventory</i>	Conduct an annual dry weather visual inventory of each outfall. Take photos and use a database to provide baseline info and track discharge characteristics over time.	2014	X	X	X	X	X	
<i>ID-3 Illicit Discharge Detection and Elimination Source Investigations and Corrective Actions</i>	1. Conduct an investigation(s) per permit section F.5.d.3(ii) to identify and locate the source of any suspected illicit discharge within 72 hours of becoming aware of the suspected illicit discharge.	2014 - As Needed	X	X	X	X	X	was ID-4 in SWMP

<i>BMP</i>	<b>Details</b>	<b>*Target Date</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>Modifications</b>
	2. Track all reported incidents and retain a copy of all Illicit Discharge Incident Tracking Sheets.	2014 - As Needed	X	X	X	X	X	
	3. Corrective Action to Eliminate Illicit Discharge – Once the source of the illicit discharge has been determined, the Permittee will immediately notify the responsible party of the problem and eliminate to the maximum extent practicable.	2014 - As Needed	X	X	X	X	X	
	4. Continue to review Wastewater Discharge Survey as available and use to evaluate authorized non-stormwater discharges. Also use the Discharge to Grade program.	2014	X	X	X	X	X	
<i>ID-4 Field Sampling to Detect Illicit Discharges</i> <i>** This BMP would be required if any outfalls are identified that directly discharge to receiving waters or Waters of the U.S.</i>	If an outfall is flowing or ponding and it has been more than 72 hours since the last rain event:	2015 (Summer 2014)		?	?	?	?	
	1. Conduct monitoring for the following indicator parameters identified in Permit Table 1, Field Sampling							
	2. Verify that indicator parameters with the following action level concentrations specified in Permit Table 2, Action Level Concentrations for Indicator Parameters are not exceeded.							
	3. Conduct follow-up investigation per Permit Section F.5.d.3 if the action levels are exceeded.							
<i>Car Wash Fundraisers (no number)</i>	Not a required BMP. Continue to check that standard conditions are applied to AF Form 400 by 30 CES. Fundraiser car washes are to be held in a location that discharges to grade or precautions are taken to prevent discharges to storm drains.							
<i>CS-1 Construction Contract Specification</i>	Review and update model construction contract specifications to reflect requirements of the Construction Storm Water General Permit and implement appropriate BMPs.	2014 -As Needed	X	X	X	X	X	
<i>PC-1 Project Planning, Programming, Design, and Approval Process (Planning)</i>	Coordinate all construction and redevelopment BCE Work Requests, AF Form 813s, EAs and designs with the 30 CES/CEIEQ Water Resources Section for review and application of post-construction storm water requirements and controls.	2014	X	X	X	X	X	was PC-1.1 in SWMP
<i>PC-2 Hydromodification Management Plan</i>	Develop a watershed-based post-construction strategy and standards.	2014	X					description updated

<i>BMP</i>	<i>Details</i>	<i>*Target Date</i>	<i>2014</i>	<i>2015</i>	<i>2016</i>	<i>2017</i>	<i>2018</i>	<i>Modifications</i>
<i>PC-3 Project Planning, Programming, Design, and Approval Process (Design)</i>	1. Ensure applicable post-construction standards (interim and final) are adhered to for regulated projects. Include appropriate post-construction storm water controls into conceptual and final designs produced by 30 CES/CENM and or contractors.	2014 (Permit Year 1 for interim)	X	X	X	X	X	was PC-1.2 in SWMP
	2. Revise model contract specifications, Facilities Excellence Plan and applicable design checklists to include reference to post-construction standards (applicability criteria, performance criteria) established by the hydromodification project.	2014	X					
<i>PC-4 Project Planning, Programming, Design, and Approval Process (Tracking)</i>	Maintain records of all projects and the post-construction storm water controls implemented.	2014	X	X	X	X	X	was PC-1.4 in SWMP
<i>PC-5 Operation and Maintenance (O&amp;M) of Post-Construction Storm Water Management Measures</i>	Task: Implement an O&M Verification Program for regulated new development projects including:							
	(a) A database or equivalent tabular format of all projects that have installed treatment systems.	2014	X	X	X	X	X	
	(b) Maintenance Approvals: Ensure that systems and hydromodification controls installed at projects are properly operated and maintained for the life of the projects.	2014	X	X	X	X	X	
<i>PC-6 Riparian Area and Wetland Protection</i>	Incorporate the minimum 30-foot buffer zone for riparian areas and wetlands into project designs.	2014 - As Needed	X	X	X	X	X	was PC-6 in SWMP
	Accomplished via NEPA project reviews, the FES design review checklist and the optional CENM design review checklist.							
<i>GH-1 Storm Drain System Assessment</i>	Task: Assess and prioritize the MS4 storm drain system, including but not limited to catch basins, pipe and pump infrastructure, above-ground conveyances, including receiving water bodies within the urbanized area and detention basins.							was part of GH-4.2 in SWMP

<i>BMP</i>	<b>Details</b>	<b>*Target Date</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>Modifications</b>
	Assess/prioritize storm drain system facilities for cleanout. Assign a priority to all storm drain system facilities within the MS4, based on accumulation of sediment, trash and/or debris. Assign high priority to catch basins meeting criteria in permit Section F.5.f.6(ii).	2014	X	X	X	X	X	
<i><b>GH-2 Storm Drain System Maintenance</b></i>	Task: Begin maintenance of all high priority storm drain systems at least annually prior to the rainy season.							was GH-4.2 in SWMP
	Conduct a maintenance program of high priority storm drain systems that, at a minimum includes:							
	(a) Storm drain systems inspection – Based on the priorities assigned in BMP Storm Drain System Assessment and Prioritization, develop a strategy to inspect storm drain systems. At a minimum, inspect all high priority catch basins annually, prior to the rainy season.	2015		X	X	X	X	
	(b) Storm drain cleaning – Develop and implement a schedule to clean high priority catch basins and other systems. Cleaning frequencies will be based on priority areas, with higher priority areas receiving more frequent maintenance.	2015		X	X	X	X	
	(c) Maintenance of surface drainage structures –Visually monitor all open channels, detention basins, and other drainage structures for debris at least once per year and identify and prioritize problem areas. At a minimum, remove trash and debris from open channels and other drainage structures will occur annually.	2015		X	X	X	X	
	(d) Disposal of waste materials - Develop a procedure to dewater and dispose of materials extracted from catch basins. This procedure will ensure that water removed during the catch basin cleaning process and waste material will not reenter the MS4.	2014	X					
<i><b>GH-3 Pesticide, Herbicide, and Fertilizer Application and New Landscape Design and Maintenance Management</b></i>	Task: Implement a program which focuses on pollution prevention, source control BMPs, and landscape design and maintenance to reduce the amount of pesticides, herbicides and fertilizers used during their Permittee operations and activities. Implement the landscape design and maintenance on new or decorative landscapes.							was GH-5 in SWMP
	Per Section F.5.f.9(ii). Implement the following:							

<i>BMP</i>	Details	*Target Date	2014	2015	2016	2017	2018	Modifications
	(a) Evaluate pesticides, herbicides and fertilizers used and application activities performed to identify pollution prevention and source control opportunities.	Complete						
	(b) Implement practices that reduce the discharge of pesticides, herbicides and fertilizers. At a minimum:	2014	X	X	X	X	X	
	1) Educate applicators and distributors of storm water issues. (NOTE: Overlaps with PE-5 & Permit Section F.5.b.2(ii)(i))	2014	X	X	X	X	X	
	2) Implement integrated pest management measures that rely on non-chemical solutions. See permit Section F.5.f.9(ii).	2014	X	X	X	X	X	
	3) Collect and properly dispose of unused pesticide, herbicides, and fertilizers; and	2014	X	X	X	X	X	
	4) Minimize irrigation run-off.	2014	X	X	X	X	X	
<i>GH-4 Street Sweeping</i>	1. Maintain monthly street sweeping of parking lots and daily street sweeping of roadways.	2014	X	X	X	X	X	was GH-4.3 & 4.4 in SWMP
	2. Track the number of miles of pavement swept and the weight of material disposed of at the landfill.	2014	X	X	X	X	X	
<i>GH-5 MICT</i>	1. Participate in all annual and triennial IG-led ESOH audits.	2014	X	X	X	X	X	was GH-8; Title changed to 'MICT' and description updated now an IG program
	2. Document all storm water deficiencies/findings, work towards a remedy, and track findings status. Attempt to close all open storm water findings.	2014	X	X	X	X	X	
<i>GH-6 Inventory of Permittee-Owned or Operated Facilities</i>	Develop and maintain an inventory of Permittee-owned or operated facilities that are a threat to water quality and are not covered by another storm water General Permit.	2015 and Update as Needed		X	X	X	X	
<i>GH-7 Map of Permittee-Owned or Operated Facilities</i>	Complete and have available a map that identifies the storm water drainage system corresponding to each of the facilities as well as the receiving waters to which these facilities discharge. The map will also show the facility and the manager of each facility, including contact information.	2015 and Update as Needed		X	X	X	X	
<i>GH-8 Facility Assessment</i>	Task: Conduct an inspection and assessment of pollutant discharge potential and pollutant hotspots.							
	The assessment will include the following:							

<i>BMP</i>	<b>Details</b>	<b>*Target Date</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>Modifications</b>
	(a) Identify as pollutant hotspots those facilities that have a high potential to generate storm water and non-storm water pollutants. See permit Section F.5.f.3(ii).	2016			X			
	(b) Document assessment procedures and results used for conducting the assessment along with a copy of any site evaluation checklists used to conduct the assessment.	2016			X			
<i>GH-9 Storm Water Pollution Prevention Plans (SWPPPs)</i>	Task: Develop and implement SWPPPs for pollutant hotspots at high priority sites. If the facility has an existing or equivalent document such as Hazardous Materials Business Plan or Spill Prevention Plan, a SWPPP is not required to be developed if that document includes the necessary information required within a SWPPP.							
	The SWPPP will identify a set of storm water BMPs to be installed, implemented, and maintained to minimize the discharge of pollutants in storm water. See permit Section F.5.f.4(ii) for details.	2017				X		
<i>GH-10 Inspections, Visual Monitoring and Remedial Action</i>	Task: Conduct regular inspections of Permittee-owned and operated facilities not covered by another storm water General Permit.							includes old GH-4.8 & 4.9 from SWMP
	Conduct inspections as follows (See permit Section F.5.f.5(ii) for details):							
	(a) Quarterly hotspot visual inspections	2018					X	
	(b) Quarterly hotspot comprehensive inspections	2018					X	
	(c) Quarterly hotspot visual observation of storm water and non-storm water discharges	2018					X	
	(d) Non-hotspot inspections – At a minimum, inspect each inventoried facility that is not a hotspot, once per permit term.	2018					X	
<i>GH-11 Permittee Operations and Maintenance Activities (O&amp;M)</i>	Task: Assess the Permittee O&M activities for potential to discharge pollutants in storm water and inspect all BMPs on a quarterly basis.							
	(a) Develop and implement O&M activity assessment. The O&M activities assessment will include, but not be limited to, the potential to discharge pollutants in storm water.	2016			X			
	(b) Identify all materials that could be discharged from each of these O&M activities. (Completed in 2013; Update)	2016			X			

<i>BMP</i>	Details	*Target Date	2014	2015	2016	2017	2018	Modifications
	(c) Develop and implement a set of BMPs that, when applied during Permittee O&M activities, will reduce the discharge of pollutants in storm water. Use the CASQA Municipal BMP Handbook (CASQA 2010) or equivalent. (Completed in 2013; Update)	2016			X			
	(d) Evaluate annually all BMPs implemented during O&M activities.	2016			X			
	NOTE: Follow Resolution No. R3-2008-0010 for any water supply, fire sprinkler, or swimming pool discharges that may reach the storm drain system.							
<i>EA-1 Effectiveness Assessment</i>	Task: Develop and implement a Program Effectiveness Assessment and Improvement Plan that tracks short and long-term progress of the storm water program. BMPs will be prioritized based on pollutants of concern or common pollutants if no pollutants of concern are identified.	2014	X	X	X	X	X	was GH-9 in SWMP
<i>Annual Report</i>	Collect data; perform the applicable municipal storm water program effectiveness assessment; develop report.	2014	X	X	X	X	X	

\* Target Date is by 30 June (end of compliance year). 2015 is Year 2 which begins 1 July 2014.

This document is not legally binding. Vandenberg AFB maintains the ability to use options other than the best management practices (BMPs) and schedule described in this document to meet the minimum requirements of the Permit.